

12/10/13 Agenda

- Warm Up
- Review Homework from last night, Worksheet 5.3 day 2
- Section 5.3 day 3
 - Writing Equations in Slope-Intercept Form given slope and a point.
- Homework - Worksheet 5.3 day 3

Warm Up: Homework Out (WS 5.3 day 2)



Rearrange into Slope-Intercept form:

$$\begin{array}{r} 2y - 6x = 8 \\ \underline{+6x} \quad \underline{+6x} \\ 2y = 6x + 8 \\ \underline{\quad} \quad \underline{\quad} \\ \frac{2y}{2} = \frac{6x}{2} + \frac{8}{2} \\ y = 3x + 4 \end{array}$$

$$y = mx + b$$

$$y = 3x + 4$$

$$m = 3$$

$$b = +4$$

(0, 4)
(1, 7)



5.3 day 3 - Write Equation in SIF given slope and a point
Target 5C

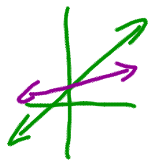
December 10, 2013

Goal: Given the slope and a point, write an equation in Slope-Intercept Form.

Formula:

$y = mx + b$ Where m = slope and b = y-intercept
POINTS ON LINE

Ex. Write the equation of a line in slope-intercept form (SIF) given the slope and a point on the line.



NEED TO FIND B

1.) $(4, 6); m = -5$

$y = mx + b$

$6 = -5(4) + b$

$6 = -20 + b$

$26 = b$

$y = -5x + 26$

2.) $(0, -1); m = 1$

$y = mx + b$

$-1 = 1(0) + b$

$-1 = 0 + b$

$-1 = b$

$y = x - 1$

3.) $(8, 5); m = \frac{1}{2}$

$y = mx + b$

$5 = \frac{1}{2}(8) + b$

$5 = 4 + b$

$1 = b$

$y = \frac{1}{2}x + 1$

4.) $(-3, 5); m = 0$

$y = mx + b$

$5 = 0(-3) + b$

$5 = 0 + b$

$5 = b$

$y = 0x + 5$
 $y = 5$

